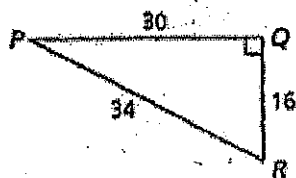
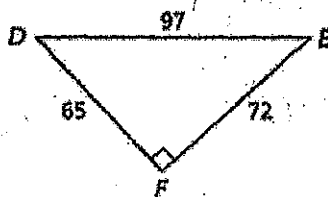


Find the given trigonometric ratios. Write each ratio as a fraction and as a decimal rounded to the nearest hundredth.

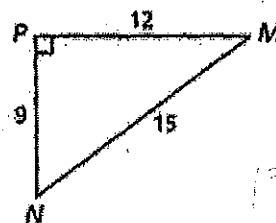
1. $\sin R$, $\cos R$



2. $\cos D$, $\cos E$



3. $\sin M$, $\sin N$



4. Given that $\sin 15^\circ \approx 0.259$, write the cosine of a complementary angle.

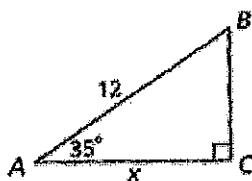
cos of 75°

5. Given that $\cos 62^\circ \approx 0.469$, write the sine of a complementary angle.

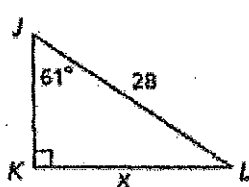
sine of 28°

Find the value of x to the nearest tenth.

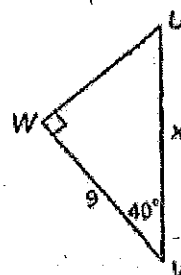
6.



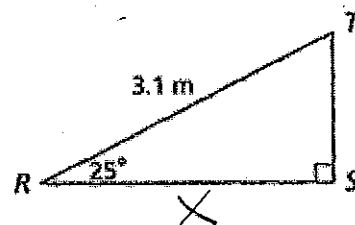
7.



8.



9. You are building a skateboard ramp from a piece of wood that is 3.1 meters long. You want the ramp to make an angle of 25° with the ground. To the nearest tenth of a meter, what is the length of the ramp's base? What is its height?



10. **Error Analysis** Three students were asked to find the value of x in the figure. The equations they used are shown at right. Which students, if any, used a correct equation? Explain the other students' errors and then find the value of x .

Lee's equation: $\sin 57^\circ = \frac{x}{15}$

Jamila's equation: $\cos 33^\circ = \frac{15}{x}$

Tyler's equation: $\sin 33^\circ = \frac{x}{15}$